

# Grau's Answers to Turf questions

If you've got a question you want Dr. Fred V. Grau to answer, please address it to Grau Q&A, Golfdom, 407 S. Dearborn, Chicago 5, Ill.



## Strive for Uniformity to Reduce Mistakes

A mistake is proof that someone tried to accomplish something. We learn by mistakes — our own and other people's. It is smart to study the mistakes of others because we will not live long enough to make all of them ourselves. The familiar quotation: "To err is human — to forgive divine" reminds us that we enjoy a God-given right to make mistakes. By the same token, it is not smart to make the same mistake twice.

We call attention to some of the common mistakes that we see every day in turfgrass management. Most mistakes are honest ones, made while earnestly trying to create a better situation. Some are the result of indolence, carelessness or lack of information.

### Secrets Well Kept

In turf management we are working with people who affect results in one way or another. We work with living grass which tells its "secrets" only to the keenly observant. We work with inanimate machines that can not think or act without human guidance. We work with chemicals that have high potential for total destruction. It takes very little imagination to envision the possibilities for mistakes.

Uniform distribution of materials is a principle most often violated. More mistakes are made in this department of turf management than any other. The errors are glaring when a potentially lethal ma-

terial is involved. The grass is "burned" in irregular patches, clearly indicating the lack of uniformity in application. In most cases the damage is neither permanent nor severe but it causes one to wonder about the application of many other materials which did not show at the time.

With a good "watering in" much or all of the visible evidence can be hidden. But, what is happening in the turfgrass community — in the root zone — among the tiny inhabitants — as a result of the overdose in patches? True, we kept the evidence from showing and, players were convinced no mistake was made. Effects of the excesses may show up later in various ways. We search for signs to diagnose the later troubles, forgetting that there was non-uniform application earlier.

### Stripes and Patches

All of us have seen lawns that were striped like a zebra's coat. Many fairways have looked the same — only more so. After weed spraying we have observed parallel lines of weeds that were not injured in the slightest simply because the spray did not hit them. The stripes in between had at least a double dose. Putting greens have turned up with the same peculiar designs which show exactly where the spreader missed or overlapped.

Applications of fungicides may not have exhibited patterns that were at once apparent but should we think that, just because nothing showed at once, that they  
(Please turn to page 54)

were applied uniformly? We know a piece of turf that was treated with a material that does not burn. There was no damage but now, several weeks later, every spot that had a heavy dose is a dark rich green. In between the grass is anemic, starving.

This spring we were shown a putting green that had been seriously damaged by the hard winter. There were odd circular streaks of green and brown that defied analysis. Finally it was determined that the tractor, which had incorporated a sterilizing agent into the soil before the green had been planted 16 months earlier, was partly responsible. The circular marks coincided with the circular motion of the tractor.

### It Happens Over and Over

It seems ridiculous to be obliged to mention this but it is still hapening! Many putting greens develop spots or areas where the grass does not do well. Upon examination it is discovered that the materials used in building were not applied uniformly. One can find pockets of pure sand, undiluted peat or manure and chunks of clay. Such non-uniformity as this can lead only to future trouble.

Regardless of the method of applying any material, the accuracy and the uniformity can be no better than the operator, assuming that the brainless machines are in "perfect" working condition. Many machines are taken out on the job before they are tested for accuracy. Even if the machines are operating perfectly, the operator is the only one who can insure perfect uniformity of application. A moment of carelessness and ruined grass may mar his efforts.

Uniformity of material is important, also. Lumps and chunks can clog openings. It is a mistake to try to use such materials until screening or sifting has produced a uniform texture.

### Hand Watering Best

Mistakes in watering long have intrigued us. Many have pointed out that the centers of putting greens are the hardest hit after a severe winter. Sprinklers have no brains — they just sit and pour out water so long as they are connected. When sprinklers are set around the outside of the greens, it doesn't take much imagination to realize that the center of the green will receive much more water than it needs simply because of the overlap. The most uniform greens we have seen have been those that have been



Monte Moncrief, USGA Green Section agronomist (left), shows Charles Campbell, pres., Texas Turfgrass Assn., the story of turf management as told by a small section of a green at Ranchland Hills CC, Midland, Tex., during West Texas regional field day. Campbell, director of parks and recreation for Midland, is in midst of Hogan Park 18-hole course construction and a playground building job. Jimmie Gamewell, a supt.-pro with a great deal of successful experience with tough conditions of West Texas, is bringing the Hogan job along in great shape, says, Campbell. Conference at Ranchland drew 35 persons, big attendance considering distance the supts. have to travel and their urgent work in mid-May.

watered by hand, where and when needed.

Perhaps some day there will be invented a device that will apply materials with perfect uniformity, without mistakes, and without having to depend upon human judgment to such a high degree. What a boon that would be.

### Kentucky Blue to Bent

**Q.** We have some greens that are Kentucky bluegrass only. Can we sow Astoria bent with a light topdressing and eventually have a bent green? We have thrown bent clippings from some greens on to fairway grass and now have bent on some areas on the fairways. (Minnesota)

**A.** During recent visits in the northern part of the country, I have seen where Astoria bent has suffered very severely during the winter. I would advise against sowing Astoria bent into your bluegrass greens. I would much rather you would use Penn-cross bent seed because it has the possibility of being more permanent, more resistant to disease and will give you a tighter, denser putting green. One lb. of Penn-cross bent seed to 1,000 sq. ft. is the maximum planting rate. It would be best to use a spiker